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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/448,055	11/23/99	KODAMA K	990612/LH

TM02/1011
FRISHAUF HOLTZ GOODMAN LANGER AND CHICK
767 THIRD AVENUE 25TH FLOOR
NEW YORK NY 10017-2023

EXAMINER	
MCALLISTER,S	
ART UNIT	**PAPER NUMBER**
2167	11

DATE MAILED: 10/11/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/448,055	Kodama et al
Examiner	**Art Unit**
Steven B. McAllister	2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Jul 30, 2001* .

2a) ☒ This action is **FINAL.** 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *2-13* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *2-13* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 2-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. An abstract idea, per se, is not patentable subject matter under 35 U.S.C. 101. The practical application of an abstract idea which produces a useful, concrete and tangible result, however, is patentable subject matter under 35 U.S.C. 101. *State Street Bank & Trust Co. V. Signature Financial Group Inc.,* 47 USPQ2d 1596, 1601-2 (Fed. Cir. 1998). A disembodied data structure and method of making it (such as a method of producing an ordered list of manufacturing steps in the present application) is merely the manipulation of abstract ideas and therefore nonstatutory. *In re Warmerdam*, 33 F.3d 1354. While the method presented may be useful, no tangible, concrete result is provided. (See notes in "Response to Arguments").

As to claim 13, an abstract idea, per se, is not patentable subject matter under 35 U.S.C. 101. The practical application of an abstract idea which produces a useful, concrete and tangible result, however, is patentable subject matter under 35 U.S.C. 101. *State Street Bank & Trust Co. V. Signature Financial Group Inc.,* 47 USPQ2d 1596, 1601-2 (Fed. Cir. 1998). A disembodied data structure and method of manipulating it are merely the manipulation of abstract

ideas and therefore nonstatutory. *In re Warmerdam*, 33 F.3d 1354. The method of claim 13 is not concrete or tangible.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 2-13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 6 recites the defining a series product; defining products by a collection of values of attributes of use; setting manufacturing series activities for achieving particular values of the attributes of use. However, these steps are not adequately disclosed in the specification to enable one of ordinary skill in the art to make or use the invention without undue experimentation.

Claim 7 recites the method of claim 6 wherein one of the attribute values of the particular product is left undetermined and the manufacturing process is derived using a default value. However, this is not adequately disclosed in the specification to enable one of ordinary skill in the art to make or use the process without undue experimentation.

Claim 10 recites deriving a manufacturing process for a new product from parts used in the series activities. However, this is not adequately disclosed in the specification to enable one of ordinary skill in the art to make or use the process without undue experimentation.

Claim 12 recites that works-in-process are automatically synthesized, but this is not adequately disclosed in the specification to enable one of ordinary skill in the art to make or use the process without undue experimentation.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 10, 11 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 is indefinite because the preamble of the claim recites the subcombination of a method for deriving a manufacturing process, but the body of the claim recites the combination of a method for deriving a manufacturing process and a method for retrieval of parts for a new product. It is not clear whether the applicant intended to claim the combination or the subcombination. In applying art to the claims, it was assumed that the subcombination was intended.

Claim 11 is indefinite because it is unclear what is meant by "are not registered".

Claim 13 is indefinite because the preamble of the claim recites the subcombination of a method for deriving a manufacturing process, but the body of the claim recites the combination of

a method for deriving a manufacturing process and a method for deriving and managing a by-product. It is not clear whether the applicant intended to claim the combination or the subcombination. In applying art to the claims, it was assumed that the subcombination was intended.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

8. Claims 2, 4, 6, 9, 10, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Costanza (6189980).

Costanza shows defining a series products having a collection of attributes (col. 6, lines 56-64). It inherently shows defing products by a collection of attributes since a product for a particular use is chosen by its attributes. It further shows mapping those attributes to process steps 16 and producing a process 50.

As to claim 8, Costanza shows assembly.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Costanza.

Costanza shows all elements of the claim except that specific attributes are one of shape grain and function. However, it is notoriously old and well known in the art to have shape as an attribute. Further, shape is an inherent attribute of any solid article of manufacture and specific processes are required to achieve that shape. It would have been obvious to one of ordinary skill in the art would to include shape as an attribute in order to know how to make the item.

As to claim 5, Costanza shows all elements of the claim except the specific number of attributes being between 10 and 20. However, the number of attributes would vary from item to item depending on the item and its complexity and a product having 10-20 attributes is obvious based on the relative complexity of the item.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Costanza in view of Kristoff et al(6128542).

Costanza shows all elements of the claims except using a manufacturing process derived using a default value. Kristoff et al show use of a default value in deriving a process. It would

have been obvious to one of ordinary skill in the art to modify the method of Costanza by allowing the use of default values as taught by Kristoff et al in order to allow manufacture of items where certain parameters are not critical.

Response to Arguments

12. Applicant's arguments filed 7/30/01 have been fully considered but they are not persuasive.

The applicant argues, citing *State Street* and *AT&T v. Excel*, that the claims provide useful, concrete, and tangible results and therefore fulfill the requirements of 35 U.S.C. 101. First, *State Street* requires that an invention be concrete -- that a particular result can be assured. In the rejected claims, several steps are not concrete. For instance, the steps of defining a set of products; defining each product by a collection of values of attributes; and setting manufacturing series activities for achieving particular values of attributes are not concrete. A particular result cannot be assured for any of these steps. A product might be defined by using different attributes by different people. Additionally, different series activities can be used to achieve the same value of an attribute (for instance two different milling processes could be used to achieve the same shape). In contrast, in *State Street* and *AT&T*, the claimed inventions had determinate outcomes. Second, both *State Street* and *AT&T* dealt with cases which claimed producing an output using data processing equipment. Finally, the output of a manufacturing process comprising a list of manufacturing series activities is abstract absent an implementation of the manufacturing process.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. McAllister whose telephone number is (703) 308-7052.

Steven B. McAllister

October 9, 2001

ROBERT P. OLSZEWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600 2100